

Appl. No. 09/771,977
Amtd. Dated April 21, 2004
Reply to Office action of February 19, 2004
Attorney Docket No. P12291-US
EUS/J/P/04-1079

REMARKS/ARGUMENTS

1.) Amendments

Claims 5, 6, and 20 have been amended, claims 8, 9, and 24 have been cancelled and claims 31-33 have been added.

2.) Premature Final Office Action

In the prior Office Action, dated September 16, 2003, the Examiner rejected claims 1-7, 10, 11-14, 18, 20-23, 25 and 29 as being anticipated by Johnson. In response, the Applicant submitted arguments traversing the rejection in view of Johnson. In the instant Office Action, the Examiner states that Applicant's arguments were "not persuasive." The Applicant disagrees with the basis of the Examiner's rejection of Applicant's arguments.

The Applicant argued that Johnson used a signal from an oscillator to calibrate amplifier gain, while, in contrast, as described *infra*, the Applicant's invention utilizes a signal generated by one or more amplifiers themselves, such as an amplifier's inherent noise signal, as a reference signal to calibrate the gain of the amplifiers. The Examiner stated that "the [Applicant's] claims merely state a calibrating signal for measuring the gain of one or more amplifiers without using a received input signal, nowhere in the claim did [Applicant] go into the specific details of either using or not using a local oscillator signal to calibrate the amplifier gain is [sic] as an essential element of the claimed invention." The Applicant fails to understand the Examiner's position. The reason the Applicant's claims don't mention an oscillator is because the Applicant's invention does not require an oscillator. Applicant's invention also doesn't require many

Appl. No. 09/771,977
Amdt. Dated April 21, 2004
Reply to Office action of February 19, 2004
Attorney Docket No. P12291-US1
EUS/J/P/04-1079

other components, but it is not necessary to include claim language to exclude everything the invention doesn't require, it is only necessary to claim that which is required.

Furthermore, without directly addressing the Applicant's argument that Johnson fails to disclose using a signal generated by one or more amplifiers themselves, such as a noise signal generated directly by the amplifiers, the Examiner bolsters his rejection of Applicant's arguments in view of Johnson by stating that Logan "further discloses the calibrating signal can be a noise power." It is improper for the Examiner to reject Applicant's arguments traversing a §102 rejection by asserting a new reference (Logan). The Examiner is asserting a new ground of rejection which was not necessitated by any substantive claim amendments. See: MPEP §107.07(a). If the Examiner desires to reject Applicant's claims, and arguments, based on a combination of references, he should withdraw the finality of the present Office Action and issue a new Office Action clearly supporting his rejection based on such combination of references.

3.) Allowable subject Matter

The Examiner objected to claims 8-9 and 24 as being dependent upon a rejected base claim, but indicated such claims would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims. The Applicant has cancelled claims 8, 9 and 24 and redrafted in independent form as new claims 31, 32 and 33, respectively. Accordingly, claims 31-33 are allowable.

Appl. No. 09/771,977
Amdt. Dated April 21, 2004
Reply to Office action of February 19, 2004
Attorney Docket No. P12291-US1
EUS/J/P/04-1079

4.) Claim Rejections – 35 U.S.C. § 102(b)

The Examiner rejected claims 1-7, 10, 11-14, 18, 20-23, 25, and 29 as being anticipated by United States Patent No. 4,031,469 issued to Johnson. Whereas Johnson fails to disclose each and every limitation recited in those claims, the Applicant traverses the rejection.

Claim 1 recites:

1. A method for calibrating one or more amplifiers (100,200) comprising the steps of:
 - i) generating a noise signal (N_a+N_i) produced by said one or more amplifiers (100,200) when no input signal (S_i+N_i) is connected (Alt. 2) to at least one amplifier of said one or more amplifiers (100,200); and
ii) using said noise signal (N_a+N_i) as a calibrating signal for estimating a corresponding gain (G) of said one or more amplifiers (100,200) by measuring (600) at at least one output of said one or more amplifiers (100,200) the amount of noise (S_{tot}) of said one or more amplifiers (100,200). (emphasis added)

The Applicant's invention utilizes a signal generated by one or more amplifiers themselves as a reference signal to calibrate the gain of the amplifiers. Independent claims 1 and 3 are each characterized by the use of a noise signal produced by one or more amplifiers when no input signal is connected, and using that signal as a calibrating signal. Claims 7 and 21, which are dependent from independent claims 5 and 20, respectively, also characterize the calibrating signal as a noise signal produced by an amplifier.

In contrast to Applicant's invention, Johnson utilizes the signal from an oscillator to calibrate the amplifier gain. As shown in Figure 2 of Johnson, a 400 MHz oscillator 62 is coupled to the amplifier by switch 66 when the receiver is placed in calibrate mode (via switches 64, 46 and 66). Thus, Johnson does not disclose using a signal generated

Appl. No. 09/771,977
Amdt. Dated April 21, 2004
Reply to Office action of February 19, 2004
Attorney Docket No. P12291-US1
EUS/JP/04-1079

by one or more amplifiers themselves, such as an amplifier's inherent noise signal, as a reference signal to calibrate the gain of the amplifiers. Therefore, Johnson fails to anticipate claim 1.

Whereas independent claim 3, recites limitations analogous to those of claim 1, and independent claims 5, 6 and 20 recite that the calibrating signal is not the output of an oscillator (as described by Johnson), Johnson also fails to anticipate those claims. Furthermore, whereas claim 2 is dependent from claim 1; claim 4 is dependent from claim 3; claims 7, 10, 12-13 and 18 are dependent from claim 5; claims 11 and 14 are dependent from claim 6; and claims 21-23, 25 and 29 are dependent from claim 20, and include the limitations of their respective base claims, those claims are also not anticipated by Johnson. The Applicant, therefore, respectfully requests that the Examiner withdraw the rejection of claims 1-7, 10, 11-13, 14, 18, 20-23, 25 and 29 as being anticipated by Johnson.

5.) Claim Rejections – 35 U.S.C. § 103 (a)

The Examiner rejected claims 15-17, 19, 26-28 and 30 as being unpatentable over Johnson (US 4,031,469) in view of Logan, et al. (US 4,521,861). The Applicant traverses the rejection of those claims as being obvious.

As established *supra*, claims 7 and 20 are not anticipated by Johnson. Logan fails to cure the deficiencies of Johnson; i.e., Logan also does not disclose using a signal generated by one or more amplifiers themselves, such as an amplifier's inherent noise signal, as a reference signal to calibrate the gain of the amplifiers. Therefore, claims 7 and 20 are not obvious over Johnson in view of Logan. Whereas claims 15-17

Appl. No. 09/771,977
Amndt. Dated April 21, 2004
Reply to Office action of February 19, 2004
Attorney Docket No. P12291-US1
EUS/JP/04-1079

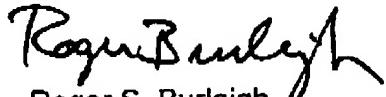
and 19 are dependent from claim 7, and claims 26-28 and 30 are dependent from Claim 20, those claims are also not obvious over Johnson in view of Logan. The Applicant, therefore, respectfully requests that the Examiner withdraw the rejection of claims 15-17, 19, 26-28 and 30.

CONCLUSION

In view of the foregoing amendments and remarks, the Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance for Claims 1-33.

The Applicant requests a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



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